Finally, Claims 10-31, 33 and 36-39 stand rejected as allegedly being obvious over <u>Tu</u>, <u>Musland-Sipper</u>, <u>Simpson</u>, <u>Zheng</u> and further in view of <u>Ray</u> '322 (newly cited) and <u>Bateman</u> '756 (previously cited). These rejections are respectfully traversed.

As discussed in the previous Amendment of February 25, 2002, Claim 1 of Applicants' invention is directed to an apparatus for providing weather information onboard an aircraft, and includes a processor unit which processes weather information after it is received onboard the aircraft from a ground-based source containing a plurality of types of weather information, and a graphical user interface which provides a graphical presentation of the weather information to a user onboard the aircraft. The graphical user interface includes a user selectable option that allows the user to request specific weather information for transmission from the ground-based source to the aircraft.

Claims 6 and 8 also relate to an apparatus for providing weather information onboard an aircraft, and include a processor unit and a graphical user interface. As in Claim 1, these claims recite that the graphical user interface includes a user selectable option that allows the user to request specific weather information for transmission from the ground-based source to the aircraft. In Claim 6, the graphical user interface also provides a plan view of the weather information and the position of the aircraft to a user onboard the aircraft, and includes a user selectable option for centering the plan view on the position of the aircraft, even as the position of the aircraft changes. The graphical user interface in Claim 8 provides a plan view of the weather information for a selected altitude to a user onboard the aircraft, and includes a user selectable option for changing the selected altitude.

Claim 9 is directed to a method of providing convection information to an aircraft, and includes the steps of collecting convection information at a centralized data center,

providing a specific request from the aircraft for the convection information, and transmitting the convection information from the data center to an aircraft in response to the request.

The remaining independent claims, i.e., Claims 14, 19, 24, 28, 32 and 35, also relate to a method of providing different types of weather related information to an aircraft.

These claims include the step of providing a specific request from the aircraft for the information, and transmitting the information from the centralized data center to the aircraft in response to the request.

Applicants' claimed invention provides the user with the ability to request specific weather information to be transmitted from a ground-based source or a data center. This allows the information received onboard the aircraft to be tailored specifically to the onboard user's needs, as unwanted information is not received.

The primary citation to <u>Tu</u> is discussed thoroughly in the Description of the Related Art section of the specification (in paragraphs 4-6) and was cited in the Information Disclosure Statement of October 30, 2000. The Office Action relies on <u>Tu</u> for a general teaching of an apparatus for providing weather information onboard an aircraft. <u>Tu</u> includes a processor unit for processing weather information after it is received onboard the aircraft from a ground-based source.

The secondary citation to <u>Simpson</u> relates to a system for providing weather information along a travel route, and was cited for providing a ground-based source containing a plurality of types of weather information, for providing a plan view of the weather information, and including a user selectable option for centering the plan view on the position of the aircraft or for changing a selected altitude.

The secondary citation to <u>Musland-Sipper</u> relates to a system for communicating between an aircraft, and was relied upon in the Office Action for allegedly providing a graphical user interface with a user selectable option that allows the user to request specific weather information for transmission from the ground-based source to the aircraft.

Initially, it is respectfully submitted that it would not have been obvious to one skilled in the art to modify the weather information system in <u>Tu</u> in view of the teachings of the secondary citations as proposed in the Office Action.

Tu's cockpit weather information system allows an aircraft to receive weather information on an updated, ongoing basis. Weather information is assimilated at a central source and sent via a high speed data link to a satellite communication service. The compiled weather information is then transmitted to a broadcast satellite, and from there to a receiver provided on the aircraft. As discussed in paragraph 6 of the subject application, a drawback of this system is its failure to provide for two-way communication between the onboard user interface and the ground station. In Tu, the information is continuously compiled and sent to the aircraft.

In the communication system of <u>Musland-Sipper</u>, a graphical interface is provided as an improved communication system between an aircraft and an air traffic control center (ATC). Conventionally, oral communication systems were use to communicate between the aircraft and ATC.

It is respectfully submitted, however, that neither <u>Tu</u> nor <u>Musland-Sipper</u> provides the necessary incentive or motivation to be combined in the manner proposed in the Office Action. As discussed above, <u>Tu</u> provides only for one-way communication between the ground station and the aircraft. Further, based on <u>Tu's</u> established system of receiving updated weather information on a continuing basis, there would be no need to communicate with the

ground station. On the other hand, in <u>Musland-Sipper</u>, conventional two-way oral communication is replaced with a graphical user interface. It is respectfully submitted, therefore, that only through impermissible hindsight would one skilled in the art have modified <u>Tu</u> to include a two-way communication using a graphical interface as proposed in the Office Action.

Furthermore, even if the art could have been combined in the manner proposed in the Office Action, it is respectfully submitted that such a combination still fails to teach or suggest Applicants' claimed invention.

In the graphical interface disclosed in <u>Musland-Sipper</u>, a REPORT/REQUEST menu 70, shown in Figure 7, includes an actuating button 2L to bring up a "REQ WEATHER DEV" page. This allows the operator to request for a "weather deviation" up to a specified distance and in a given direction (see column 4, lines 24-27). It is respectfully submitted, however, that this is not a request for specific weather information as recited in Applicants' claimed invention. <u>Musland-Sipper</u> provides no details regarding the requested weather deviation, and as such cannot be read so broadly as to teach requesting specific weather information.

Accordingly, the proposed combination of art, even if proper, still fails to teach or suggest Applicants' invention as set forth in independent Claims 1, 6 and 8. Accordingly, reconsideration and withdrawal of the rejection of Claims 1 and 3-8 under 35 U.S.C. §103 is respectfully requested.

With respect to independent Claims 9, 14, 19, 24, 28, 32 and 35, the rejection of these claims is deemed to be overcome for the same reasons set forth above with respect to independent Claims 1, 6 and 8. Namely, that it would not have been obvious to combine <u>Tu</u> and <u>Musland-Sipper</u> in the manner proposed in the Office Action, but even assuming, <u>arguendo</u>, this

art could have been combined as proposed, such a combination still fails to teach or suggest

Applicant's claimed invention. As discussed above, these claims include the steps of providing a
specific request from the aircraft for weather related information, and transmitting the
information in response to the request.

The tertiary citation to <u>Zheng</u> relates to a clear air turbulence detection system and was cited for its teaching of providing different types of weather information. <u>Zheng</u> fails, however, to compensate for the deficiencies in the art discussed above with respect to independent Claims 9, 14, 19, 24, 28, 32 and 35.

Accordingly, reconsideration and withdrawal of the rejection of Claims 2, 9, 14, 19, 24, 28, 32 and 35 under 35 U.S.C. §103 is deemed to be in order and such action is respectfully requested.

The <u>Ray</u> patent relates to a cellular weather information system for an aircraft and was cited for its teaching of providing weather information transmitted from a data center to the aircraft via telephone and a satellite communication link.

Bateman relates to an aircraft weather information system and was cited for its teaching of graphically displaying convection information onboard an aircraft.

These references, fails however, to compensate for the deficiencies in the art discussed above with respect to Applicants' independent claims. Therefore, reconsideration and withdrawal of the rejection of Claims 10-31, 33 and 36-39 is also respectfully requested.

Accordingly, it is respectfully submitted that Applicants' invention as set forth in independent Claims 1, 6, 8, 9, 14, 19, 24, 28, 32 and 35 is patentable over the cited art. In addition, dependent Claims 2-5, 7, 10-13, 15-18, 20-23, 25-27, 29-31, 33, 34 and 36-39 set forth

additional features of applicants' invention. Independent consideration of the dependent claims is respectfully requested.

Applicants' undersigned attorney may be reached in our Washington, D.C. office by telephone at (202) 530-1010. All correspondence should continue to be directed to Honeywell's address given below.

Respectfully submitted,

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